

Date: Friday, 22/05/2009 8:59:12 AM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: WEARPLATE
Job Number	: 48119		
Estimate Number	: 10437		
P.O. Number	:	Part Number	: D33191 GY
This Issue	: 22/05/2009	S.O. No.	:
Prsht Rev.	: NC	Drawing Number	: D3319 REV. B
First Issue	: / /	Project Number	: N/A
Previous Run	: 47199	Drawing Revision	: B
Written By	:	Material	:
Checked & Approved By	: <u>2009.05.25</u>	Due Date	: 28/05/2009
Comment	: Est: B 05.10.14 Added step 9, dwg rev B KJ/EC	Qty:	10 Um: Each
	: Est Rev:C Now on Waterjet 06-10-26 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M1010S18GA	1010/1025 SHEET .048
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Comment: Qty.: 0.6594 sf(s)/Unit Total : 6.5940 sf(s)

1010/1025/A21/6aA SHEET .048

Batch: 110996 **RB 9-6-3**

2.0	WATER JET	FLOW WATER JET
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Comment: FLOW WATER JET

1-Cut as per Dwg D3319

Dwg Rev: B

Prog Rev: B

RB 9-6-3

2-Deburr if necessary **RB 9-6-3**

(12)

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

RB 9-6-3

4.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

2026663 (42)

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1

Deburr if necessary

u/a S

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 22/05/2009 8:59:12 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 48119

Part Number: D33191

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

- 1- Form using DT8326 & DT8261 as per Dwg D3319 Rev: B
2- Form flat on press using DT8776 block

SB 09/06/04 (12)

7.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

S 09/06/04 (12)

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

- 1- Layout weld location as per Dwg D3319 using jig D3319-1T3
2- Weld hard surface using D3319-1T2 per QSI 004 and Dwg D3319 Rev: B

Qty	Part Number	Description	Batch
A/R	N/A	7560 Hardcoat Rod	M109 813

EL 9-6-4 (12)

9.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

S 09/06/04 (12)

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/06/04 (12)

11.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME: 11:45am

OVEN TEMPERATURE: 320°F

FINISH TIME: 12:45pm

96 09-06-08 (12)

12.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

BR 09-06-8 (12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 22/05/2009 8:59:12 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 48119

Part Number: D33191

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

P/N: D3319-1, B/N: BXXXXX

For Product Eligibility see PDA05-18

and Stock

Location: 5457

09/06/09 (12)

14.0

QC21

FINAL INSPECTION/W/O RELEASE



09/06/09

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-06-09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 4819
Description: Wearplate		Part Number: D3319-1
Inspection Dwg: D3319	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

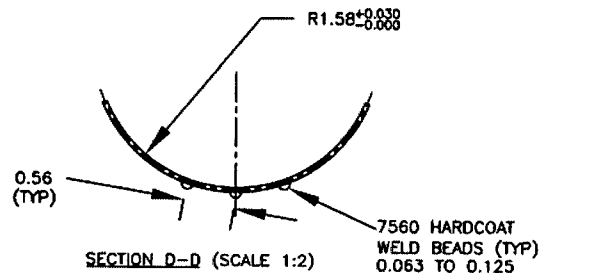
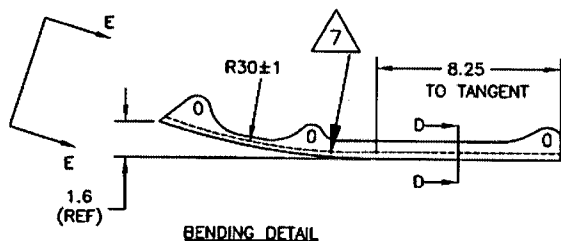
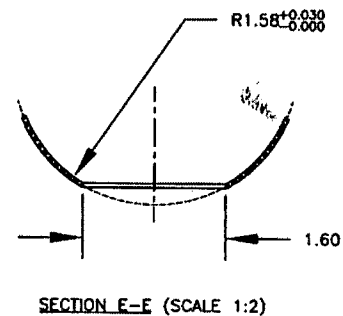
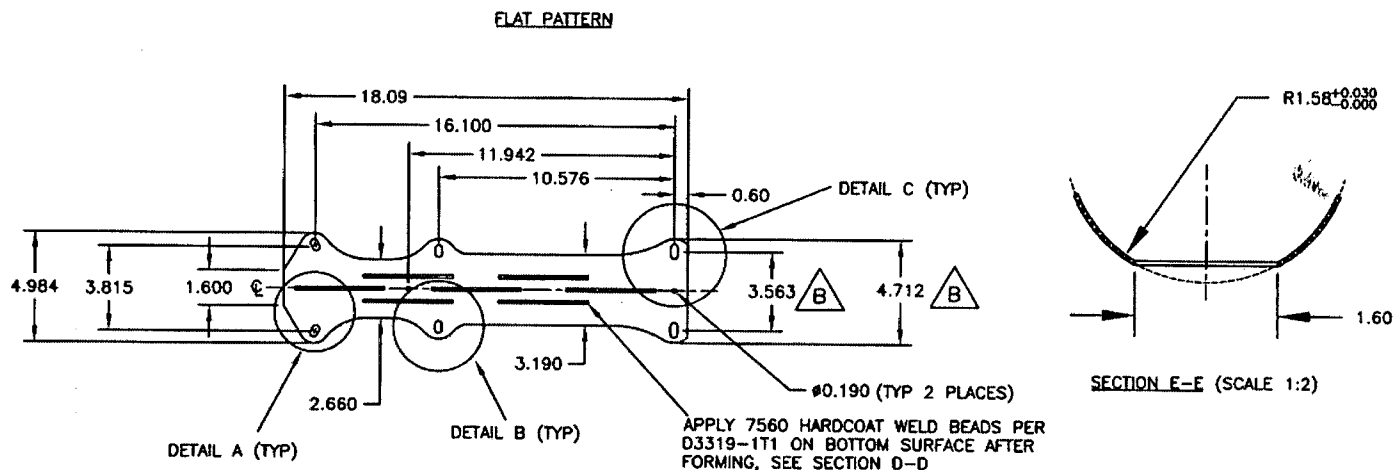
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
4.984	+/-0.010	4.985	*			
1.600	+/-0.010	1.601	*			
2.660	+/-0.010	2.668	*			
3.190	+/-0.010	3.193	*			
3.563	+/-0.010	3.569	*			
4.712	+/-0.010	4.712	*			
0.60	+/-0.030	.601	*			
10.576	+/-0.010	10.576	*			
11.942	+/-0.010	11.942	*			
18.09	+/-0.030	18.09	*			
Ø0.316 x 0.546	+0.006/-0.001 x +/-0.010	.318 x .548	*			
Ø0.316 x 0.670	+0.006/-0.001 x +/-0.010	.318 x .676	*			
Ø0.190	+0.005/-0.001	.192	*			

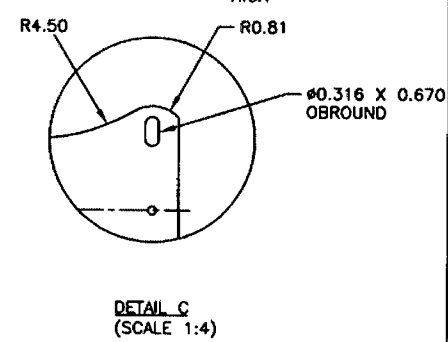
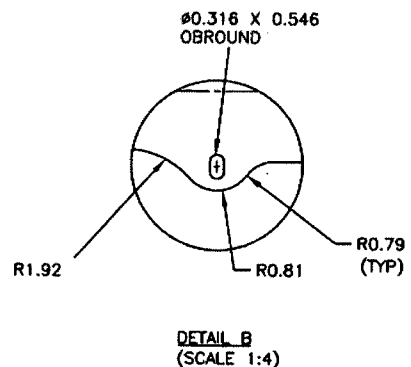
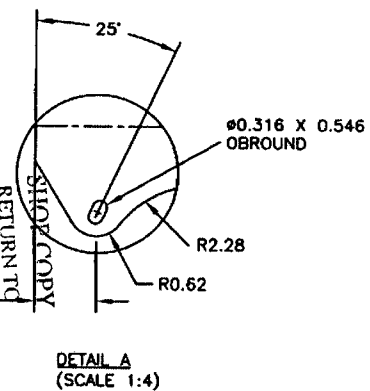
Measured by: IB	Audited by: S	Prototype Approval:	N/A
Date: 9-6-3	Date: 07/06/03	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.05.31	New Issue	KJ/JLM	

DART



RELEASED
05-09-30



- D3319-1 WEARPLATE**
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
 - 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
 - 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) PART IS SYMMETRICAL ABOUT CENTERLINE
 - 5) ALL DIMENSIONS IN INCHES
 - 6) WELD PER DART QSI 004
 - 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N 8XXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

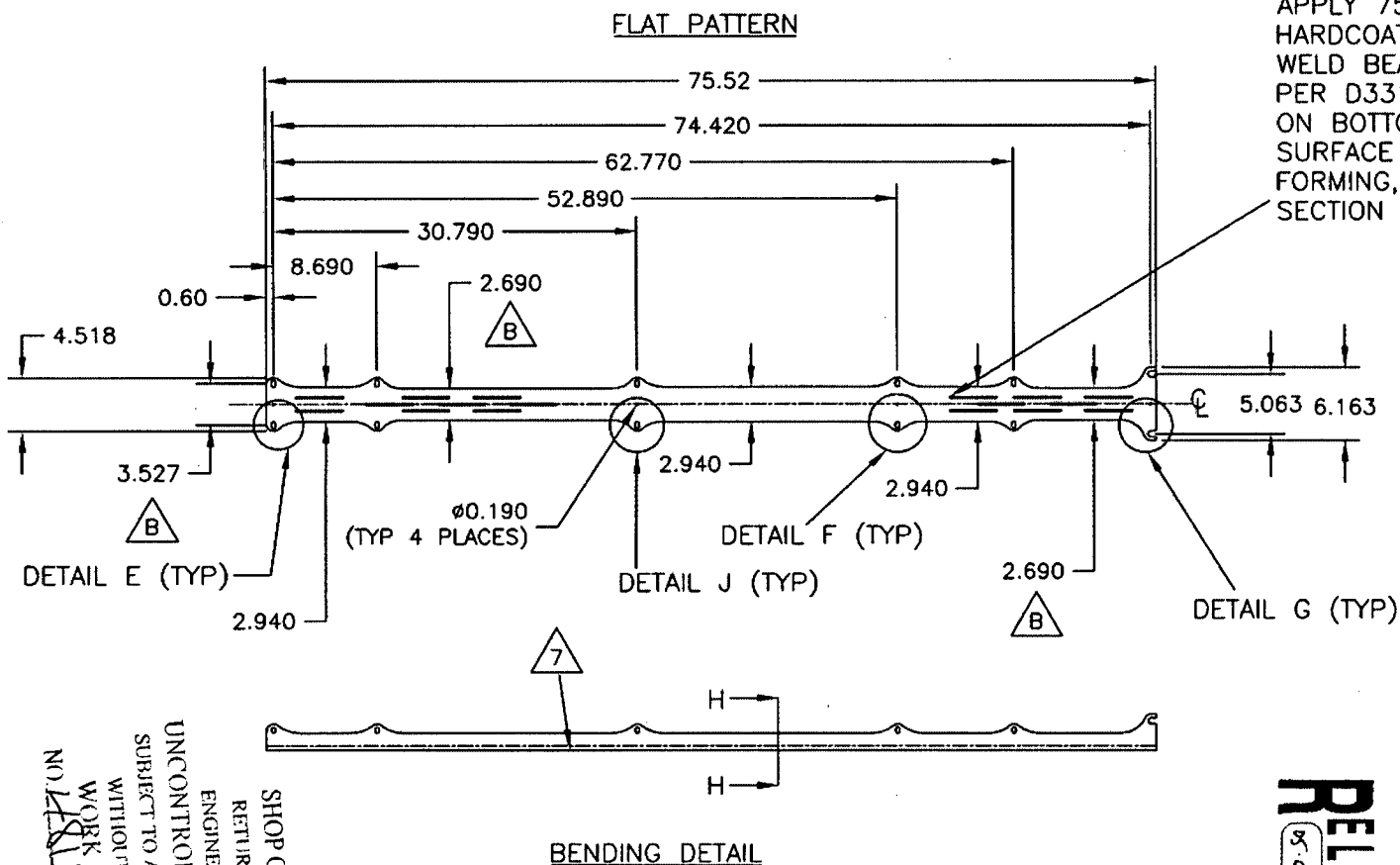
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P1	P1	HAMKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. B
		D3319	
DATE	TITLE	SHEET 1 OF 5	
05.06.06	WEARPLATE		
A	NEW ISSUE	SCALE	
05.06.06		1:8	
B	WIDEN HOLES, REDUCE WIDTH -3/-5/-7		

NO
HSL
WORK ORDER
WITHOUT NOTICE
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3319
DATE 05.06.06	TITLE WEARPLATE	REV. B SHEET 2 OF 5
	SCALE 1:15	

APPLY 7560
HARDCOAT
WELD BEADS
PER D3319-3T1
ON BOTTOM
SURFACE AFTER
FORMING, SEE
SECTION H-H



RELEASED

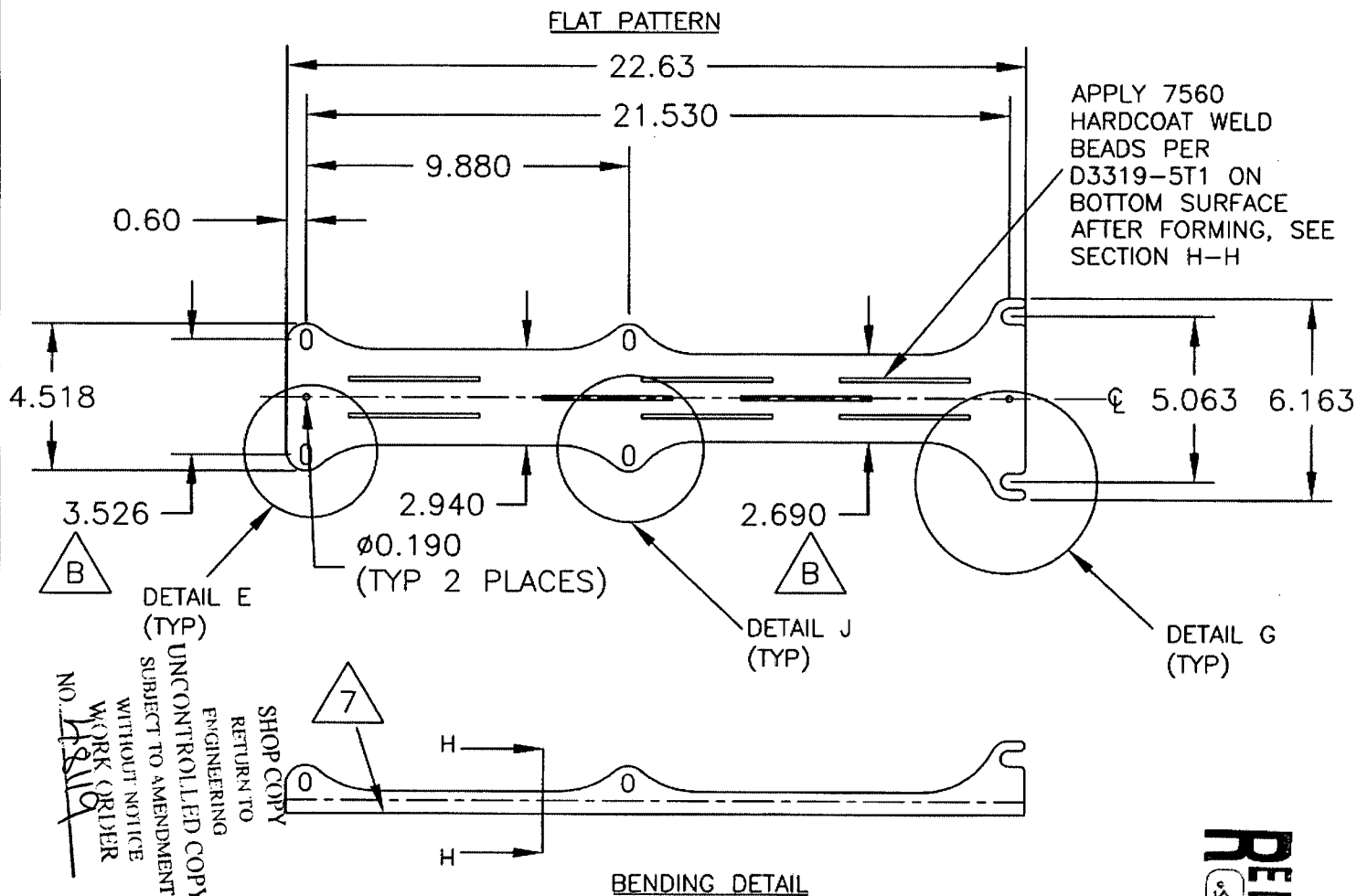
D3319-3 WEARPLATE

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 18119

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAMMERSBURY, ONTARIO, CANADA		
041	041	DRAWING NO.	D3319	REV. B
CHECKED #	APPROVED #	TITLE	WEARPLATE	SHEET 3 OF 5
DATE 05.06.06				SCALE 1:5

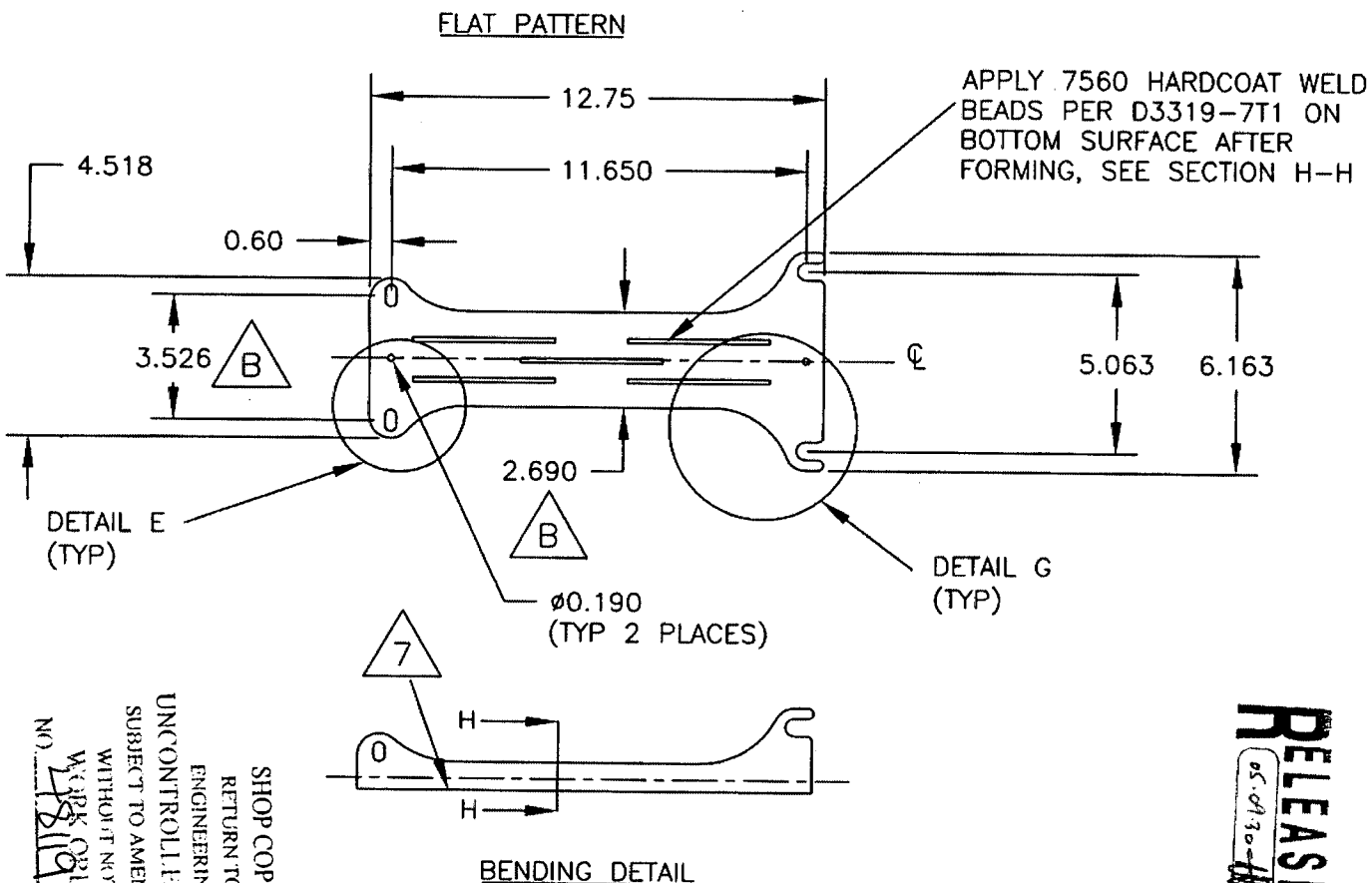
**D3319-5 WEARPLATE**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

RELEASED
05-07-30-110

DART

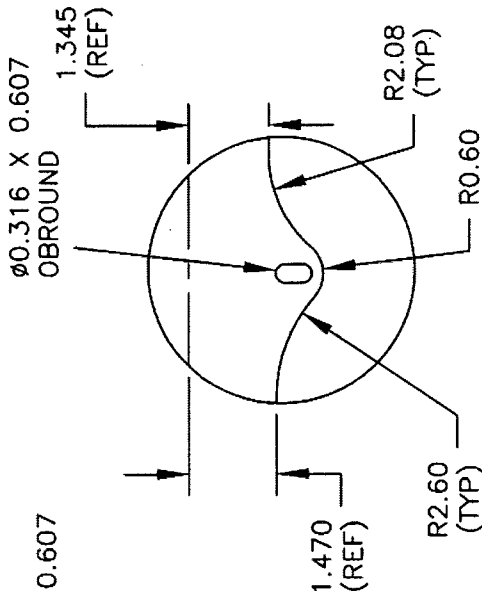
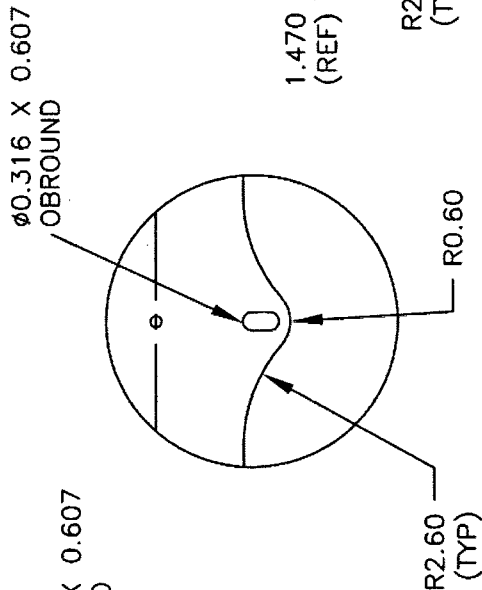
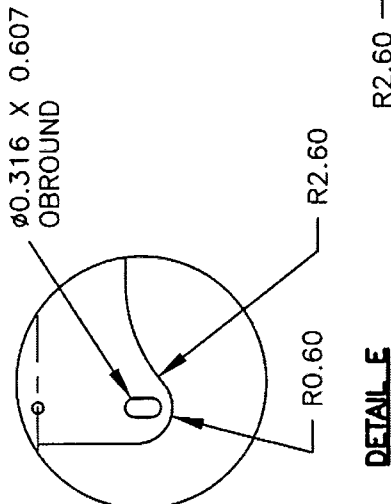
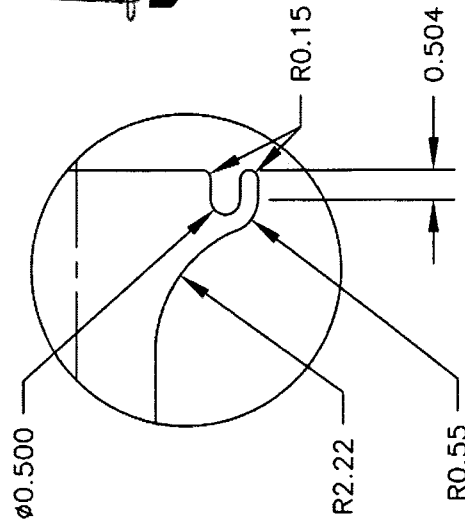
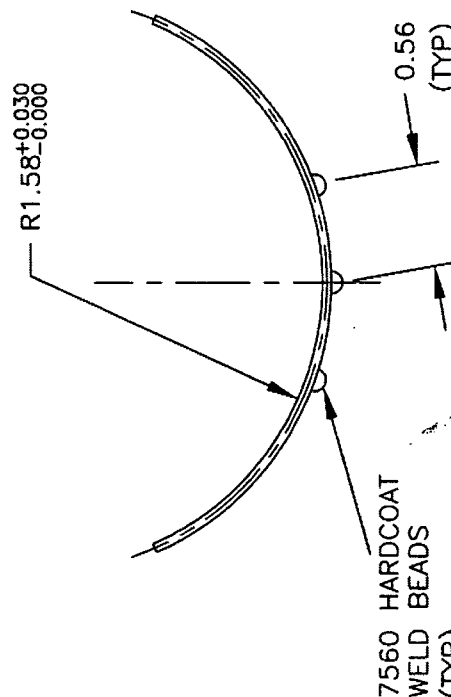
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CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA
DATE	05.06.06	TITLE	D3319	REV. B
		WEARPLATE		SHEET 4 OF 5
				SCALE 1:5

RELEASED
05.09.30-11**D3319-7 WEARPLATE**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-7 B/N BXXXXX,
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

DART

DESIGN <i>PH</i>	DRAWN BY <i>PH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3319	REV. B SHEET 5 OF 5
DATE 05.06.06		TITLE WEARPLATE	SCALE 1:3

RELEASED
05-09-30**DETAIL J****DETAIL F****DETAIL E****DETAIL G****SECTION H-H
(SCALE 1:1)**

7560 HARDCOAT
WELD BEADS
(TYP)
0.063 TO 0.125
HIGH

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

0.4819

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